Hawai'i Volcanoes National Park
Hawai'i

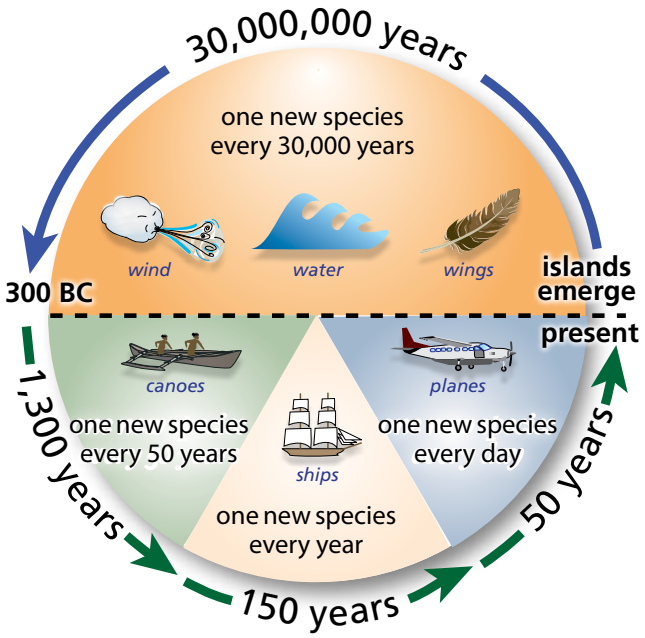
National Park Service
U.S. Department of the Interior

Respect Hawai'i Volcanoes National Park
– a natural and cultural treasure –

More than 2,000 miles from the closest continent, only a handful of insects, seeds, and birds found their way to Hawaii before human contact. These early colonizers adapted to a unique land environment—a place with no four-legged animals, reptiles, amphibians, mosquitoes, or ants. Over the evolutionary course of millions of years, entirely new species emerged. But the arrival of humans 1500 years ago, ships in the last 200 years, and airplanes in recent decades has resulted in hundreds of new species being rapidly introduced. This pace has not allowed Hawaii's unique native plants and animals time to adapt—many are now extinct, and more will be lost without our care and stewardship.

Lava flows from Kīlauea into the ocean.

Native lehua blossom.



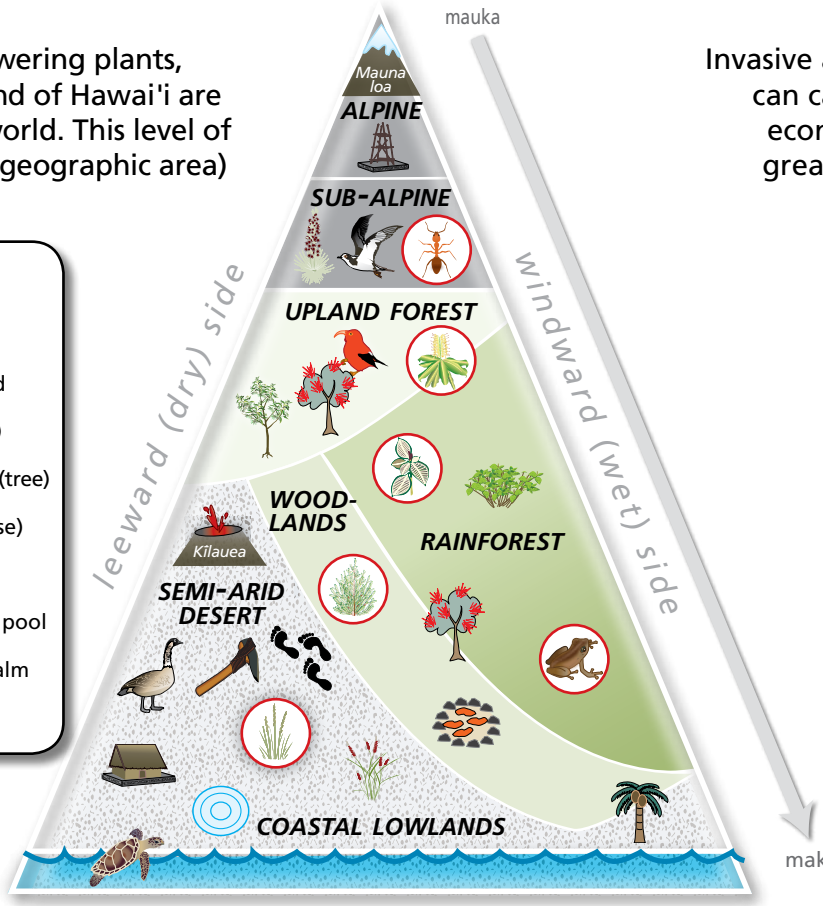
Non-native plants and animals have been arriving at an ever increasing rate. Approximately 10% of non-native plants are considered highly disruptive and targeted for control in Hawai'i Volcanoes National Park.

The native species in these habitat zones are threatened by invasive species.

Natural resources
Greater than 90% of the flowering plants, birds, and insects on the island of Hawai'i are found nowhere else in the world. This level of endemism (native to a small geographic area) is unsurpassed in the world.

Major cultural and natural resources in Hawai'i Volcanoes National Park

- shrine
- Hawaiian petrel
- 'ōhi'a (tree)
- olonā (shrub)
- trails
- basalt quarry
- agriculture
- house site
- summit
- silversword
- 'i'iwi (bird)
- acacia koa (tree)
- nēnē (goose)
- pili (grass)
- anchialine pool
- coconut palm
- sea turtle



Invasive species
Invasive alien plants and animals can cause environmental and economic harm, and are the greatest threat to the native wildlife in the Park.

Major invasive species threatening Park resources

- Argentine ant
- kāhili ginger
- miconia
- coqui frog
- Christmas berry
- fountain grass

Hawai'i Volcanoes National Park's least wanted

Invasive species and their impacts:


wikimedia.org

Argentine ant
(*Linepithema humile*)

IMPACTS: Extensive predation of native insects that are native plant pollinators


Forest and Kim Starr, hear.org

banana poka
(*Passiflora tarminiana*)

Highly invasive vine that smothers and shades host native plants


Forest and Kim Starr, hear.org

cane tibouchina
(*Tibouchina herbacea*)

Forms thickets that displace and shades native plants


Forest and Kim Starr, hear.org

Christmas berry
(*Schinus terebinthifolius*)

Spreads aggressively and changes soil to reduce competition


www.aphis.usda.gov/wildlife_damage/nwrc/research/invasive_research.shtml

coqui frog
(*Eleutherodactylus coqui*)

Eats huge numbers of beneficial insects and has no natural predator


Forest and Kim Starr, hear.org

firetree
(*Morella faya*)

Forms dense forests and changes soil, out-competing native plants

IMPACTS


ian.umces.edu

fountain grass
(*Pennisetum setaceum*)

IMPACTS: Very flammable, regrows quickly after fire and dominates habitats


Forest and Kim Starr, hear.org

Himalayan raspberry
(*Rubus ellipticus*)

Forms dense thickets that exclude native plants


ian.umces.edu

kāhili ginger
(*Hedychium gardnerianum*)

Spreads rapidly by seeds and rhizomes in native forest understory


Forest and Kim Starr, hear.org

ēkoa
(*Leucaena leucocephala*)

Destructive roots and large seed production, rapidly spreading its range


Forest and Kim Starr, hear.org

miconia
(*Miconia calvescens*)

Dominates understory and shades out native plants


NPS

strawberry guava
(*Psidium cattleianum*)

Spread by feral pigs eating fruits, outcompeting native forests

IMPACTS

Leave no trace

What you can do to protect Hawai'i Volcanoes National Park while you are here...

brush off your boots

remove seeds, dirt, and mud from your clothes

take out your trash and recycle

learn to identify invasive species

volunteer for invasive species removal during your park visit

make sure your car is free of hitchiking coqui frogs

Mahalo!

Additional information can be obtained from the following:

Hawai'i Volcanoes National Park
National Park Service
www.nps.gov/havo

Pacific Island Network Inventory & Monitoring Program
National Park Service
science.nature.nps.gov/im/units/pacn/

Integration & Application Network (IAN)
University of Maryland Center for Environmental Science
www.ian.umces.edu